

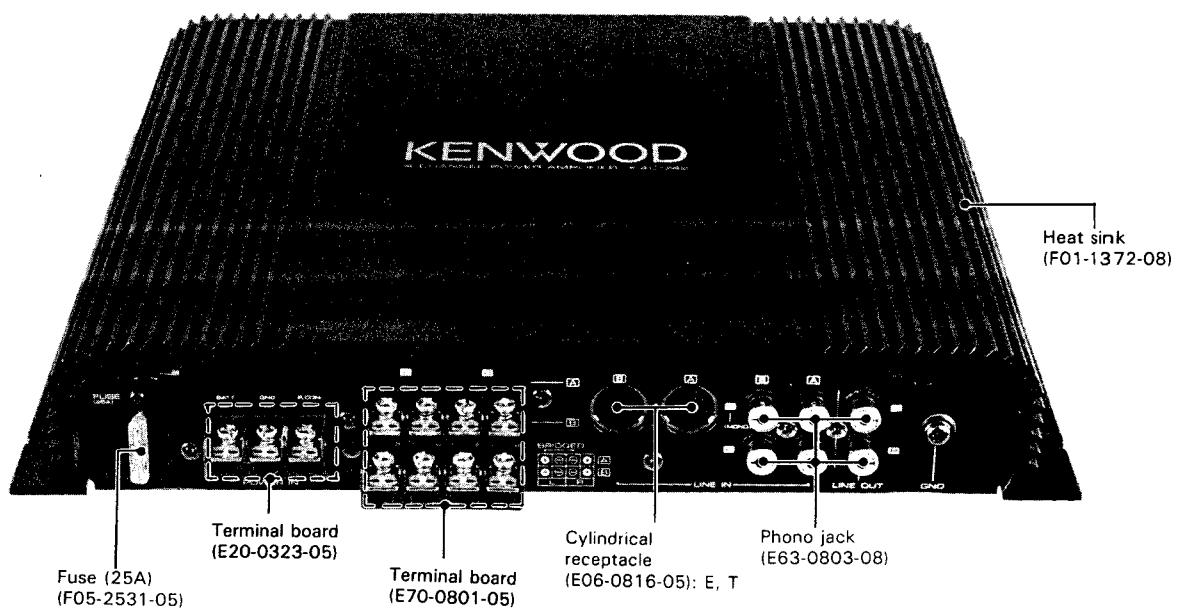
4-CHANNEL POWER AMPLIFIER

# KAC-742

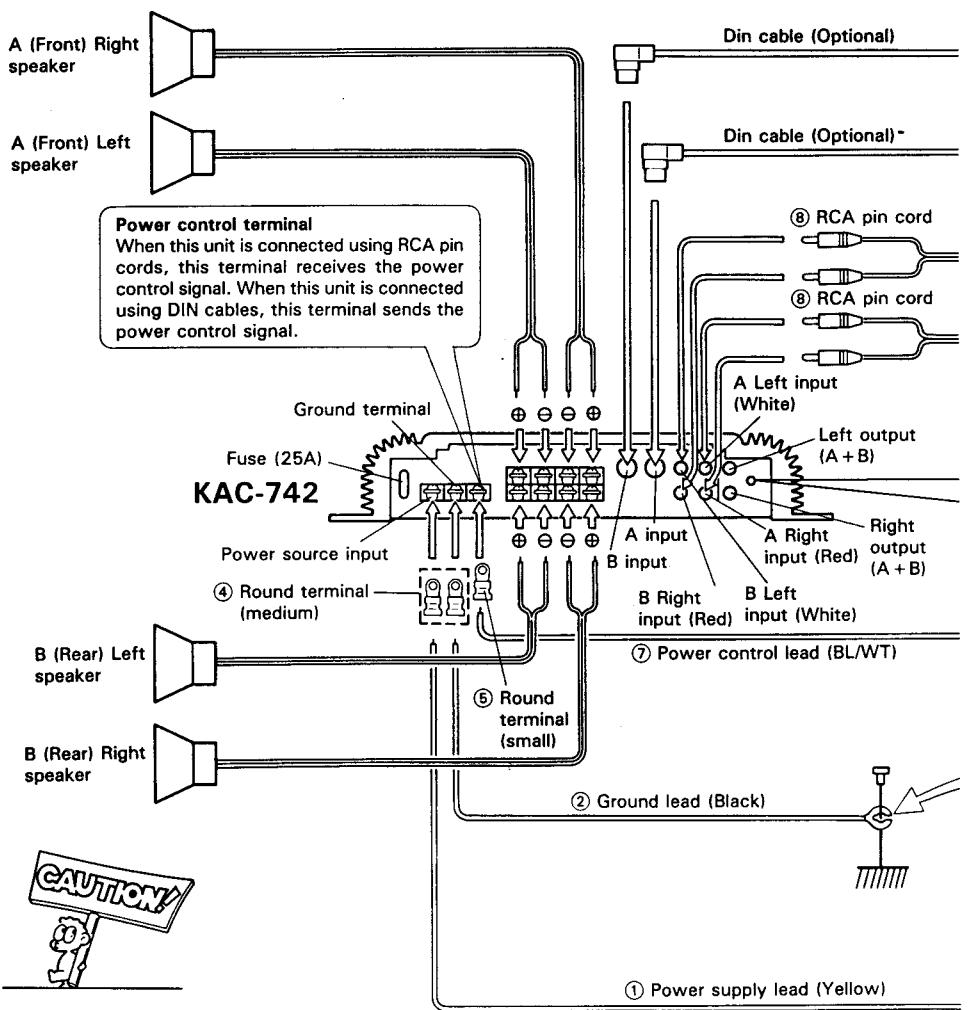
## SERVICE MANUAL

KENWOOD

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B51-6281-00(T) 3326

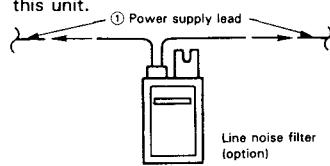


## CONNECTIONS



- If a fuse is blown, first check that the associated wires are not short-circuited then replace the fuse with a new one having the same capacity.

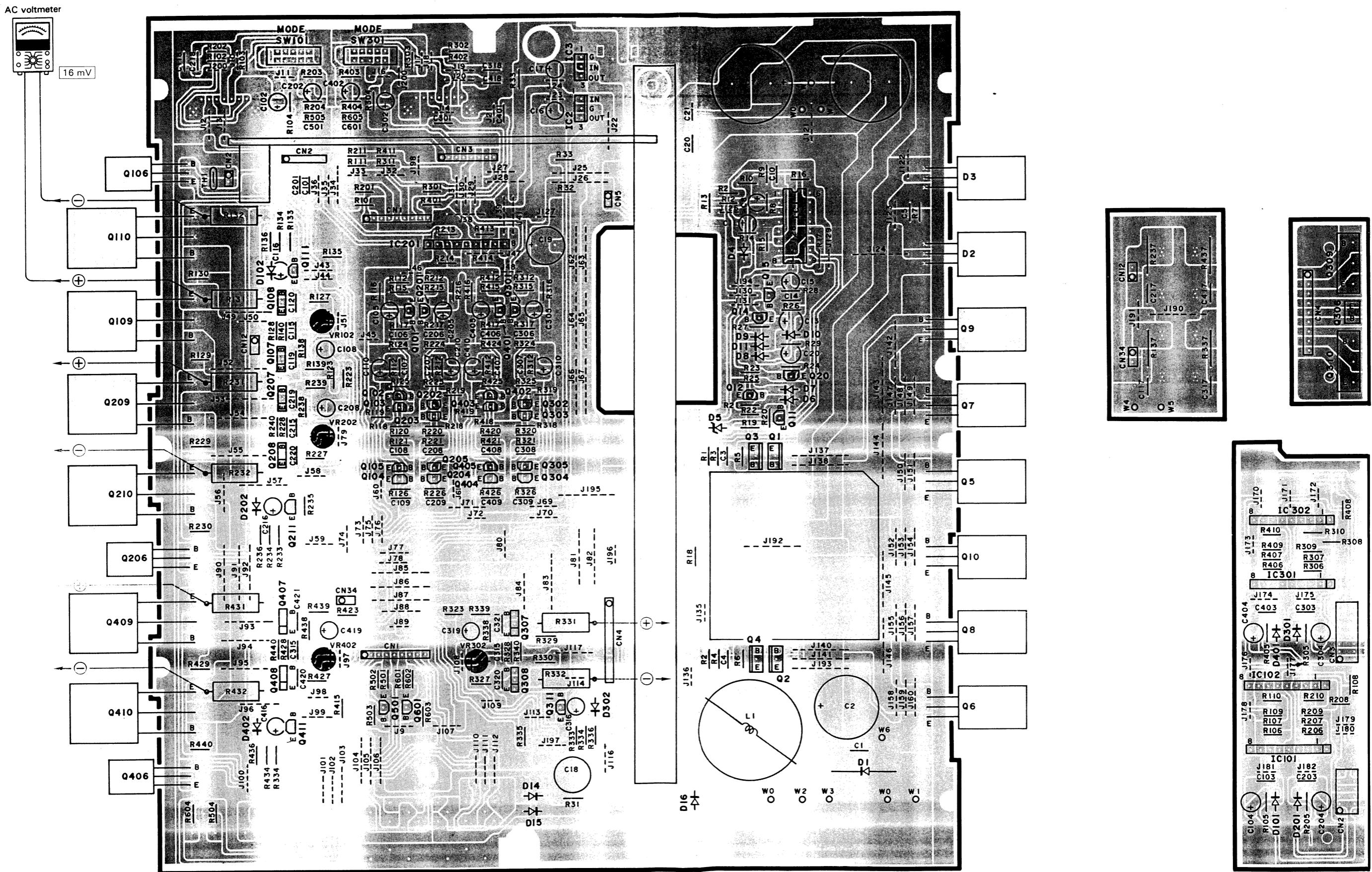
- If you hear a noise when starting the engine, connect the line noise filter (optional) to the power supply lead of this unit.



## ADJUSTMENT

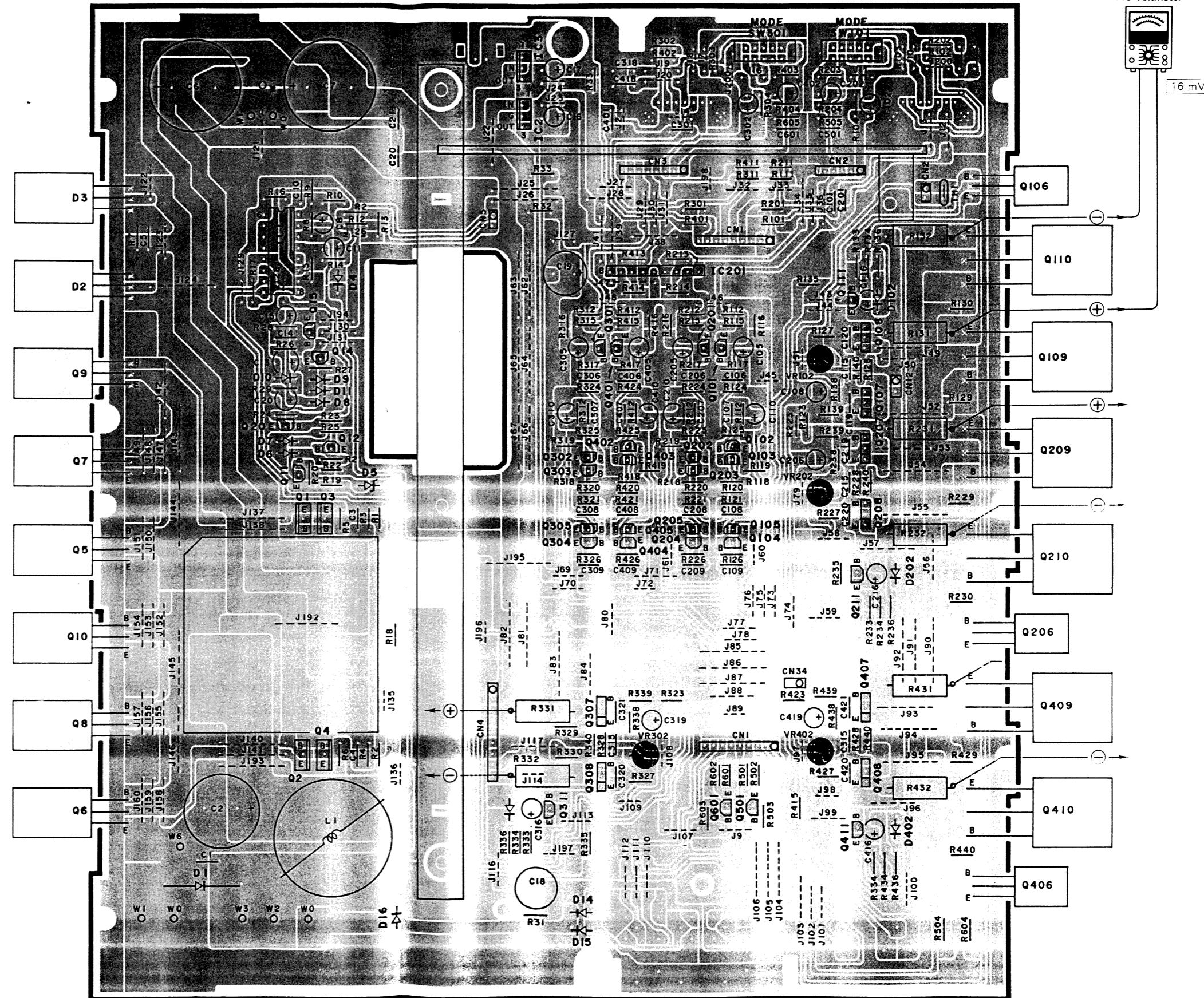
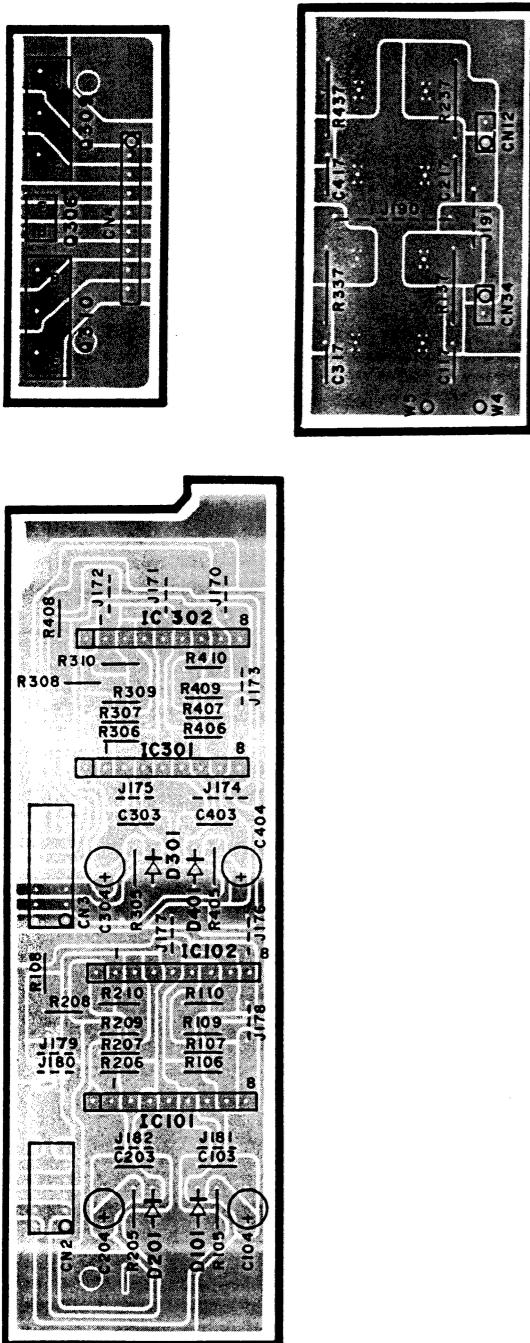
No.	ITEM	INPUT SETTINGS	OUTPUT SETTINGS	AMPLIFIER SETTINGS	ALIGNMENT POINTS	ALIGN FOR	FIG.
Connect a cassette deck:							
1	IDLE CURRENT	-	Connect a DC voltmeter between R131-R132, R231-R232, R331-R332, R431-R432	VOLUME: 0	VR102(L) VR202(R) VR302(L) VR402(R)	16mV	

## PC BOARD (Component side view)

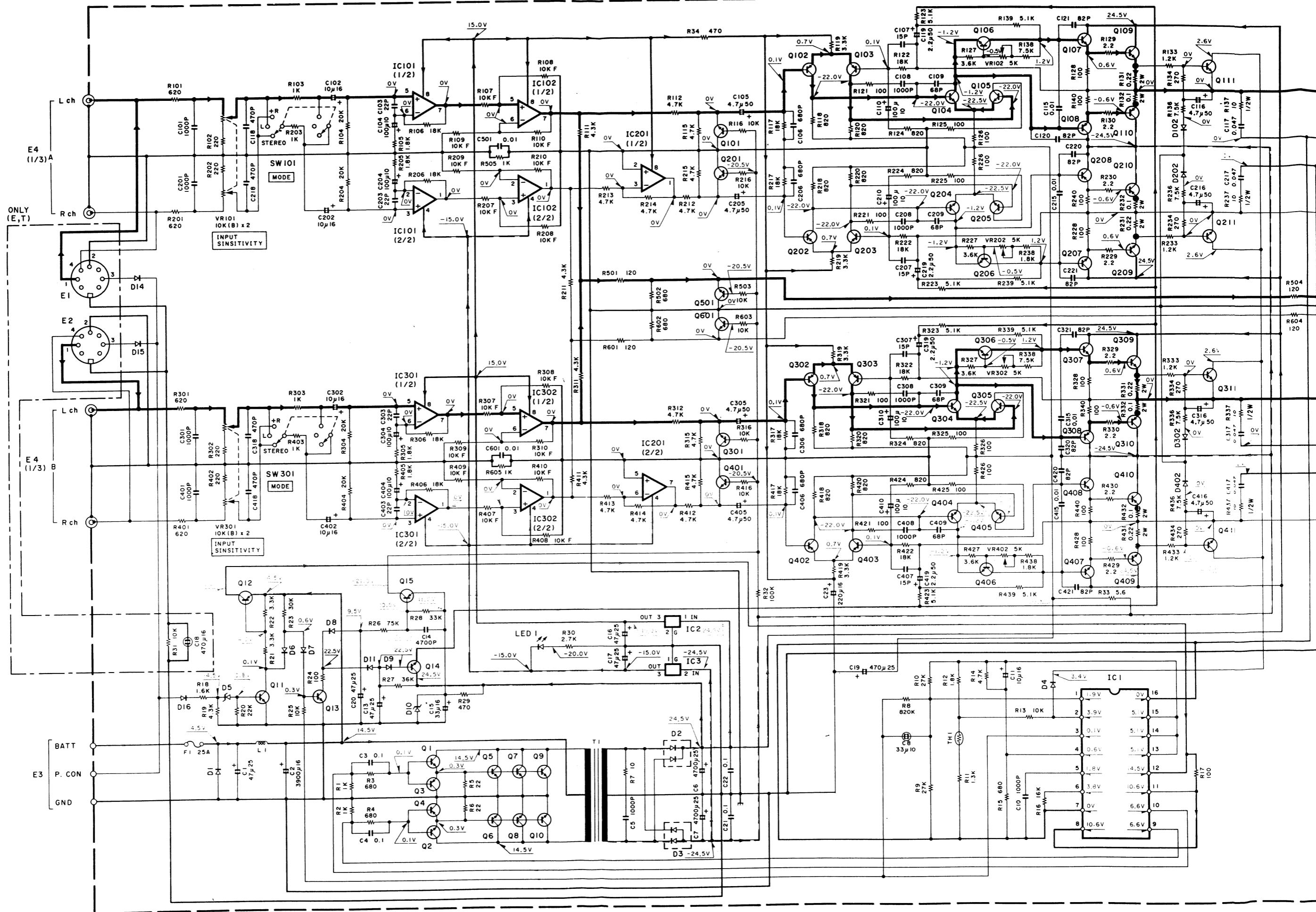


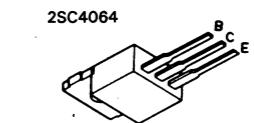
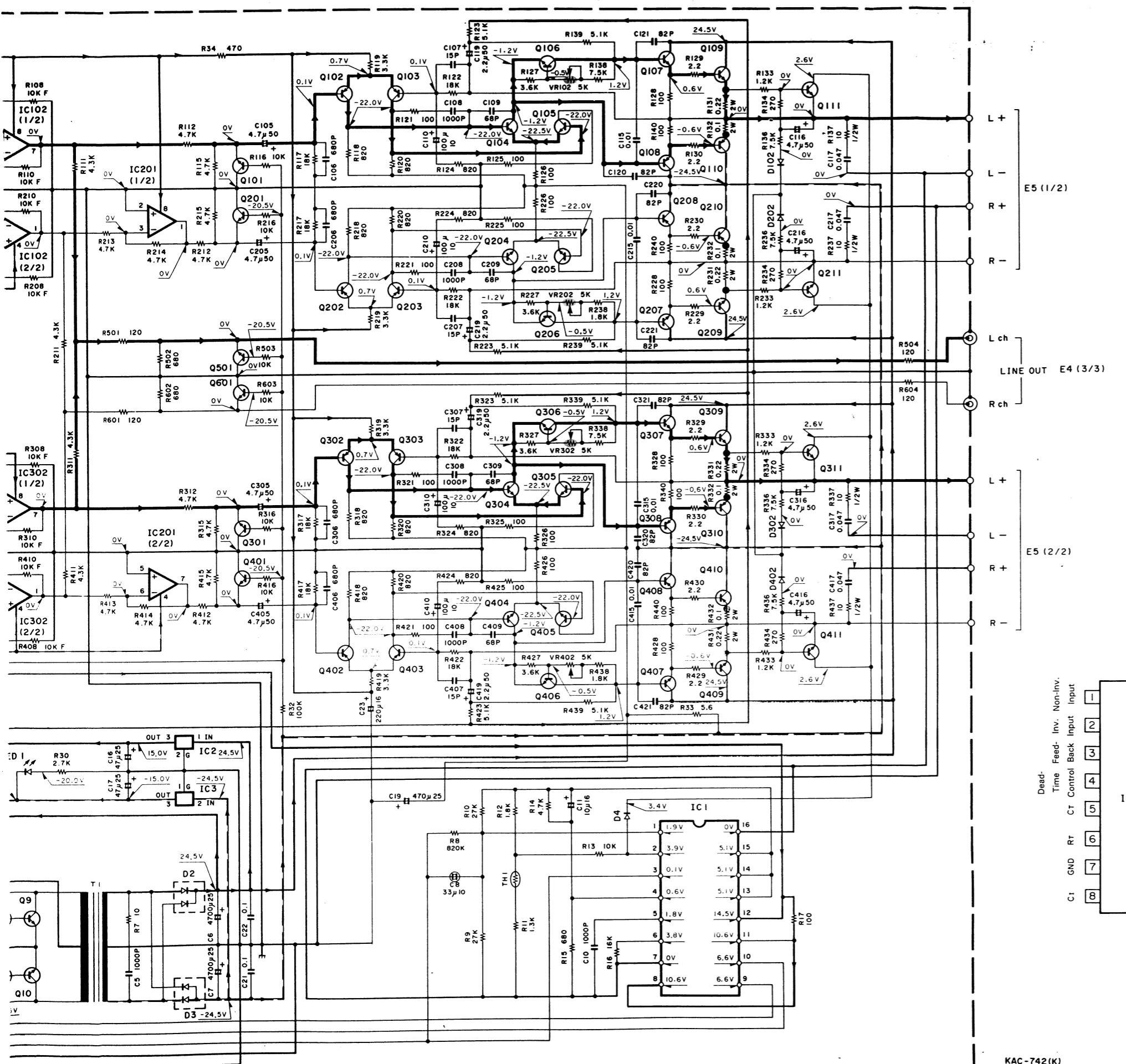
Refer to the schematic diagram for the values of resistors and capacitors.

## PC BOARD (Foil side view)



Refer to the schematic diagram for the values of resistors and capacitors.





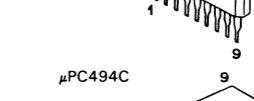
2SA1175  
2SC2785



A schematic diagram of a 2SA1670 transistor. It is a vertical NPN transistor with three leads extending from the bottom. The leftmost lead is labeled 'B' at its base, the middle lead is labeled 'C' at its base, and the rightmost lead is labeled 'E' at its base. The top of the transistor body is a rectangular shape.



$\mu$ PC4570HA



**CAUTION:** For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).  Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

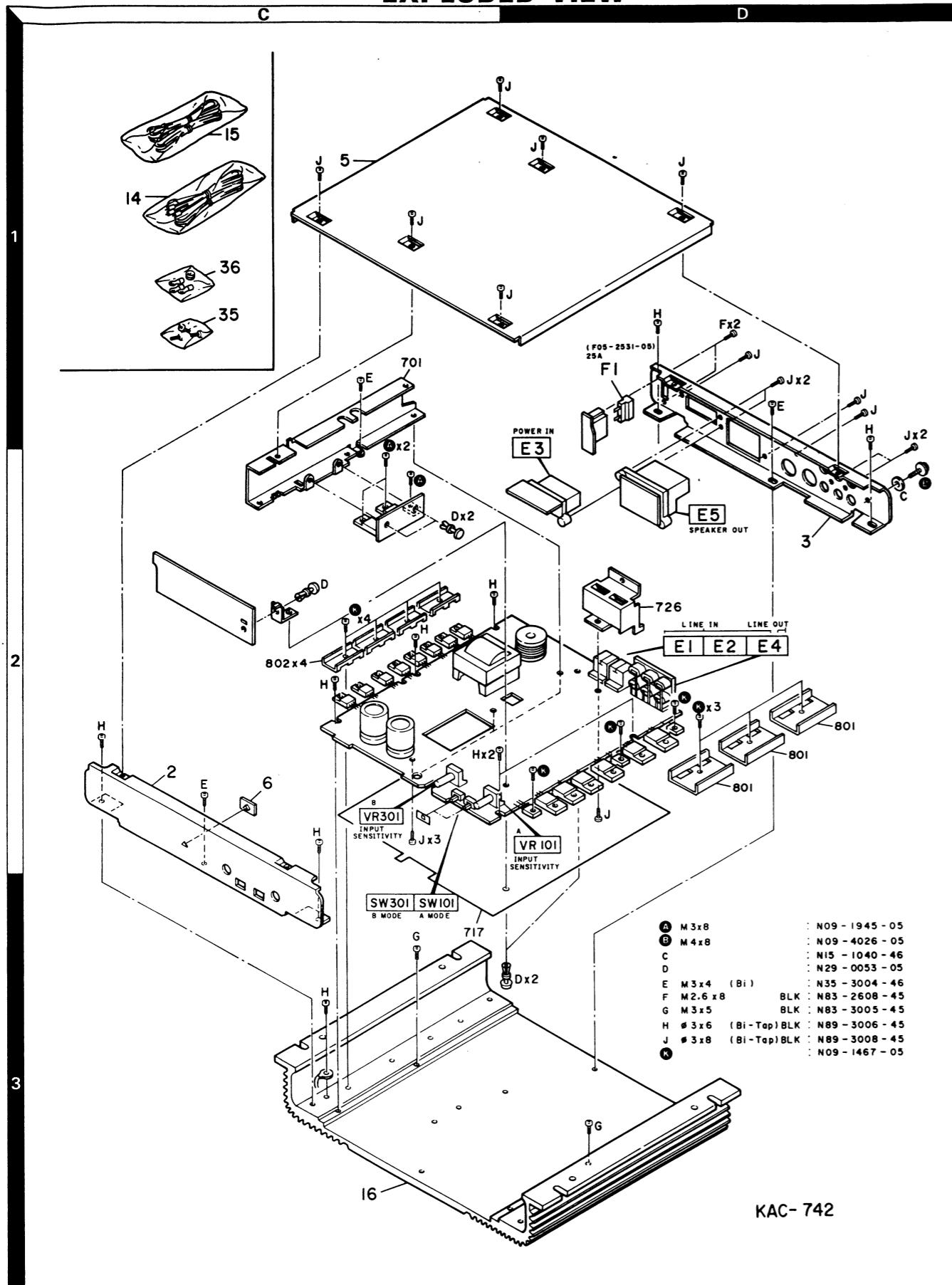
DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.

Les tensions c.c. doivent être mesurées avec un voltmètre à haute impédance. Les valeurs peuvent différer légèrement du fait des variations inhérentes aux appareils et aux instruments de mesure individuels.

Die angegebenen Gleichspannungswerte wurden mit einem hochohmigen Spannungsmesser gemessen. Dabei schwanken die Meßwerte aufgrund von Unterschieden zwischen einzelnen Instrumenten oder Geräten u.U. geringfügig.

KAC-742(

## EXPLODED VIEW



## PARTS LIST

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Ref. No. 参照番号	Address 位 置	New Parts 新	Parts No. 部品番号	Description 部品名 / 規 格	Desti- nation 仕 向	Re- marks 備考
<b>KAC-742</b>						
2	2A	*	A20-7674-08	PANEL ASSY		
3	2B	*	A23-5038-08	REAR PANEL		
3	2B	*	A23-5039-08	REAR PANEL		
5	1A	*	A40-1231-08	BOTTOM PLATE	K ET	
6	2A	*	B19-0874-08	LIGHTING BOARD		
			B44-6006-04	BADGE		
			B44-6007-04	BADGE		
			B46-0100-20	WARRANTY CARD		
		*	B64-0083-00	INSTRUCTION MANUAL	K	
		*	B64-0084-00	INSTRUCTION MANUAL	ET	
14	1A	*	E30-3676-08	RCA CORD	ET	
15	1A	*	E30-3677-08	DC CORD	ET	
16	3A	*	F01-1372-08	HEAT SINK		
F1	1B	*	F05-2531-05	FUSE (25A)		
		*	H01-9265-08	ITEM CARTON BOX		
		*	H03-3306-08	OUTER PACKING CASE		
		*	H10-4375-08	POLYSTYRENE FOAMED FIXTURE (L)		
		*	H10-4376-08	POLYSTYRENE FOAMED FIXTURE (R)		
		*	H25-0336-04	PROTECT. BAG (inst. & warrant.)		
		*	H25-0341-04	PROTECTION BAG (for unit)		
35	1A	*	N99-1564-08	SCREW SET		
A	2A	*	N09-1945-05	SCREW (M3X8)		
B	2B	*	N09-4026-05	SCREW (4X8)		
C	2B	*	N15-1040-46	FLAT WASHER		
D	2A, 3B	*	N29-0053-05	LYLON RIVET		
E	1A, 1B	*	N35-3004-46	BINDING HEAD SCREW (M3X4)		
F	1B	*	N83-2608-45	BINDING HEAD SCREW (2.6X8)		
G	3A, 3B	*	N83-3005-45	BINDING HEAD SCREW (3X5)		
H	2A	*	N89-3006-45	BINDING HEAD TAPTITE (3X6)		
J	1A, 1B	*	N89-3008-45	BINDING HEAD TAPTITE (3X8)		
K	2A, 2B	*	N09-1467-05	SCREW (3X10)		
36	1A	*	W01-0701-05	TARMINAL SET	ET	
<b>ELECTRIC CIRCUIT UNIT</b>						
LED1			B30-1342-05	LED		
C1			CE04KW1E470M	ELECTRO	47UF 25WV	
C2			C90-1634-05	ELECTRO	3900UF 16WV	
C3 , 4			CF92FV1H104J	MF	0.10UF J	
C5			CK45FB1H102K	CERAMIC	1000PF K	
C6 , 7			CE04KW1E472M	ELECTRO	4700UF 25WV	
C8			C90-2527-05	NP-ELECT	33UF 10WV	
C10			CF92FV1H102J	MF	1000PF J	
C11			CE04KW1C100M	ELECTRO	10UF 16WV	
C12			CE04KW1E470M	ELECTRO	47UF 25WV	
C13			CE04KW1E101M	ELECTRO	100UF 25WV	
C14			CK45FB1H472K	CERAMIC	4700PF K	
C15			CE04KW1C330M	ELECTRO	33UF 16WV	
C16 , 17			CE04KW1E470M	ELECTRO	47UF 25WV	
C18			C90-2510-05	NP-ELECT	470UF 16WV	
C19			CE04KW1E471M	ELECTRO	470UF 25WV	

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C21 , 22			CF92FV1H104J	MF 0.10UF J		
C23			CE04KW1C221M	ELECTRO 220UF 16WV		
C101			CK45FB1H102K	CERAMIC 1000PF K		
C102			CE04KW1C100M	ELECTRO 10UF 16WV		
C103			CC45FSL1H220J	CERAMIC 22PF J		
C104			CE04KW1A101M	ELECTRO 100UF 10WV		
C105			CE04KW1H4R7M	ELECTRO 4.7UF 50WV		
C106			CC45FSL1H681J	CERAMIC 680PF J		
C107			CC45FSL1H150J	CERAMIC 15PF J		
C108			CK45FB1H102K	CERAMIC 1000PF K		
C109			CC45FSL1H680J	CERAMIC 68PF J		
C110			CE04KW1A101M	ELECTRO 100UF 10WV		
C115			CK45FF1H103Z	CERAMIC 0.010UF Z		
C116			CE04KW1H4R7M	ELECTRO 4.7UF 50WV		
C117			CK45FF1H473Z	CERAMIC 0.047UF Z		
C118			CC45FSL1H471J	CERAMIC 470PF J		
C119			CE04KW1H2R2M	ELECTRO 2.2UF 50WV		
C120			CC45FSL1H820J	CERAMIC 82PF J		
C121			CC45FSL1H820J	CERAMIC 82PF J		
C201			CK45FB1H102K	CERAMIC 1000PF K		
C202			CE04KW1C100M	ELECTRO 10UF 16WV		
C203			CC45FSL1H220J	CERAMIC 22PF J		
C204			CE04KW1A101M	ELECTRO 100UF 10WV		
C205			CE04KW1H4R7M	ELECTRO 4.7UF 50WV		
C206			CC45FSL1H681J	CERAMIC 680PF J		
C207			CC45FSL1H150J	CERAMIC 15PF J		
C208			CK45FB1H102K	CERAMIC 1000PF K		
C209			CC45FSL1H680J	CERAMIC 68PF J		
C210			CE04KW1A101M	ELECTRO 100UF 10WV		
C215			CK45FF1H103Z	CERAMIC 0.010UF Z		
C216			CE04KW1H4R7M	ELECTRO 4.7UF 50WV		
C217			CK45FF1H473Z	CERAMIC 0.047UF Z		
C218			CC45FSL1H471J	CERAMIC 470PF J		
C219			CE04KW1H2R2M	ELECTRO 2.2UF 50WV		
C220			CC45FSL1H820J	CERAMIC 82PF J		
C221			CK45FB1H102K	CERAMIC 1000PF K		
C301			CE04KW1C100M	ELECTRO 10UF 16WV		
C302			CC45FSL1H220J	CERAMIC 22PF J		
C303			CE04KW1A101M	ELECTRO 100UF 10WV		
C304			CE04KW1H4R7M	ELECTRO 4.7UF 50WV		
C305			CC45FSL1H681J	CERAMIC 680PF J		
C306			CC45FSL1H150J	CERAMIC 15PF J		
C307			CK45FB1H102K	CERAMIC 1000PF K		
C308			CC45FSL1H680J	CERAMIC 68PF J		
C309			CE04KW1A101M	ELECTRO 100UF 10WV		
C310			CK45FF1H103Z	CERAMIC 0.010UF Z		
C315			CE04KW1H4R7M	ELECTRO 4.7UF 50WV		
C316			CK45FF1H473Z	CERAMIC 0.047UF Z		
C317			CC45FSL1H471J	CERAMIC 470PF J		
C318			CE04KW1H2R2M	ELECTRO 2.2UF 50WV		
C319			CC45FSL1H820J	CERAMIC 82PF J		
C320			CC45FSL1H820J	CERAMIC 82PF J		
C321			CK45FB1H102K	CERAMIC 1000PF K		
C401			CE04KW1C100M	ELECTRO 10UF 16WV		
C402			CE04KW1C100M	ELECTRO 10UF 16WV		

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C403			CC45FSL1H220J	CERAMIC	22PF	J		
C404			CE04KW1A101M	ELECTRO	100UF	10WV		
C405			CE04KW1H4R7M	ELECTRO	4.7UF	50WV		
C406			CC45FSL1H681J	CERAMIC	680PF	J.		
C407			CC45FSL1H150J	CERAMIC	15PF	J		
C408			CK45FB1H102K	CERAMIC	1000PF	K		
C409			CC45FSL1H680J	CERAMIC	68PF	J		
C410			CE04KW1A101M	ELECTRO	100UF	10WV		
C415			CK45FF1H103Z	CERAMIC	0.010UF	Z		
C416			CE04KW1H4R7M	ELECTRO	4.7UF	50WV		
C417			CK45FF1H473Z	CERAMIC	0.047UF	Z		
C418			CC45FSL1H471J	CERAMIC	470PF	J		
C419			CE04KW1H2R2M	ELECTRO	2.2UF	50WV		
C420			CC45FSL1H820J	CERAMIC	82PF	J		
C421			CC45FSL1H820J	CERAMIC	82PF	J		
C501			CK45FF1H103Z	CERAMIC	0.010UF	Z		
C601			CK45FF1H103Z	CERAMIC	0.010UF	Z		
E1 ,2	2B		E06-0816-05	CYLINDRICAL RECEPTACLE			ET	
E3	2B		E20-0323-05	TERMINAL BOARD				
E4	2B	*	E63-0803-08	PHONO JACK				
E5	2B	*	E70-0801-05	TERMINAL BOARD				
J801		*	J21-7280-08	MOUNTING HARDWARE				
J802		*	J21-7281-08	MOUNTING HARDWARE				
L1		*	L33-0939-08	CHOKE COIL				
T1		*	L19-0514-08	TRANSFORMER				
R107-110			RN14BK2C1002F	RN	10.0K	F	1/6W	
R131			RS14KB3DR22J	FL-PROOF	RS 0.22	J	2W	
R132		*	RS14KB3D0R1J	FL-PROOF	RS 0.1	J	2W	
R137			RS14KB2H100J	FL-PROOF	RS 10	J	1/2W	
R207-210			RN14BK2C1002F	RN	10.0K	F	1/6W	
R231			RS14KB3DR22J	FL-PROOF	RS 0.22	J	2W	
R232		*	RS14KB3D0R1J	FL-PROOF	RS 0.1	J	2W	
R237			RS14KB2H100J	FL-PROOF	RS 10	J	1/2W	
R307-310			RN14BK2C1002F	RN	10.0K	F	1/6W	
R331			RS14KB3DR22J	FL-PROOF	RS 0.22	J	2W	
R332		*	RS14KB3D0R1J	FL-PROOF	RS 0.1	J	2W	
R337			RS14KB2H100J	FL-PROOF	RS 10	J	1/2W	
R407-410			RN14BK2C1002F	RN	10.0K	F	1/6W	
R431			RS14KB3DR22J	FL-PROOF	RS 0.22	J	2W	
R432		*	RS14KB3D0R1J	FL-PROOF	RS 0.1	J	2W	
R437			RS14KB2H100J	FL-PROOF	RS 10	J	1/2W	
VR101			R10-3638-08	POTENTIOMETER	10K(B)X2			
VR102			R12-2627-08	POTENTIOMETER	5K			
VR202			R12-2627-08	POTENTIOMETER	5K			
VR301			R10-3638-08	POTENTIOMETER	10K(B)X2			
VR302			R12-2627-08	POTENTIOMETER	5K			
VR402			R12-2627-08	POTENTIOMETER	5K			
SW101		*	S62-0805-08	SLIDE SWITCH				
SW301		*	S62-0805-08	SLIDE SWITCH				
D1			RM4Z	DIODE				
D2			FMU21S	DIODE				
D3			FMU21R	DIODE				

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D4			1SS131	DIODE		
D5			MTZJ5.1B	ZENER DIODE		
D6 -9		*	1SS131	DIODE		
D10		*	MTZJ10C	ZENER DIODE		
D11			1SS131	DIODE		
D14 ,15			1SR139	DIODE		
D16			1SS131	DIODE		
D102			1SS131	DIODE		
D202			1SS131	DIODE		
D302			1SS131	DIODE		
D402			1SS131	DIODE		
IC1			UPC494C	IC(SWITCHING REGULATOR)		
IC2			NJM78M15FA	IC		
IC3			NJM79M15FA	IC		
IC101			NJM5532S	IC		
IC102			UPC4570HA	IC(OP AMP X2)		
IC201			UPC4570HA	IC(OP AMP X2)		
IC301			NJM5532S	IC		
IC302			UPC4570HA	IC(OP AMP X2)		
Q1 ,2			2SD809(F,B)	TRANSISTOR		
Q3 ,4		*	2SB1236	TRANSISTOR		
Q5 -10			2SC4064	TRANSISTOR		
Q11			2SC1740S-R	TRANSISTOR		
Q12			2SA933S-R	TRANSISTOR		
Q13 ,14			2SC1740S-R	TRANSISTOR		
Q15			2SA933S-R	TRANSISTOR		
Q101			2SC3327-A	TRANSISTOR		
Q102, 103			2SA1175(F)	TRANSISTOR		
Q104, 105		*	2SC2785(F)	TRANSISTOR		
Q106			2SD1200(Q)	TRANSISTOR		
Q107		*	2SD1857	TRANSISTOR		
Q108		*	2SB1236	TRANSISTOR		
Q109		*	2SC4385(0, Y)	TRANSISTOR		
Q110		*	2SA1670(0, Y)	TRANSISTOR		
Q111			2SC1740S-R	TRANSISTOR		
Q201			2SC3327-A	TRANSISTOR		
Q202, 203			2SA1175(F)	TRANSISTOR		
Q204, 205			2SC2785(F)	TRANSISTOR		
Q206		*	2SD1200(Q)	TRANSISTOR		
Q207		*	2SD1857	TRANSISTOR		
Q208		*	2SB1236	TRANSISTOR		
Q209		*	2SC4385(0, Y)	TRANSISTOR		
Q210		*	2SA1670(0, Y)	TRANSISTOR		
Q211			2SC1740S-R	TRANSISTOR		
Q301			2SC3327-A	TRANSISTOR		
Q302, 303			2SA1175(F)	TRANSISTOR		
Q304, 305			2SC2785(F)	TRANSISTOR		
Q306		*	2SD1200(Q)	TRANSISTOR		
Q307		*	2SD1857	TRANSISTOR		
Q308		*	2SB1236	TRANSISTOR		
Q309		*	2SC4385(0, Y)	TRANSISTOR		
Q310		*	2SA1670(0, Y)	TRANSISTOR		
Q311			2SC1740S-R	TRANSISTOR		
Q401			2SC3327-A	TRANSISTOR		
Q402, 403			2SA1175(F)	TRANSISTOR		

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Q404, 405			2SC2785(F)	TRANSISTOR		
Q406		*	2SD1200(Q)	TRANSISTOR		
Q407		*	2SD1857	TRANSISTOR		
Q408		*	2SB1236	TRANSISTOR		
Q409		*	2SC4385(0, Y)	TRANSISTOR		
Q410		*	2SA1670(0, Y)	TRANSISTOR		
Q411			2SC1740S-R	TRANSISTOR		
Q501			2SC3327-A	TRANSISTOR		
Q601			2SC3327-A	TRANSISTOR		
TH1		*	D103K4D-NHA109D	POSISTOR		

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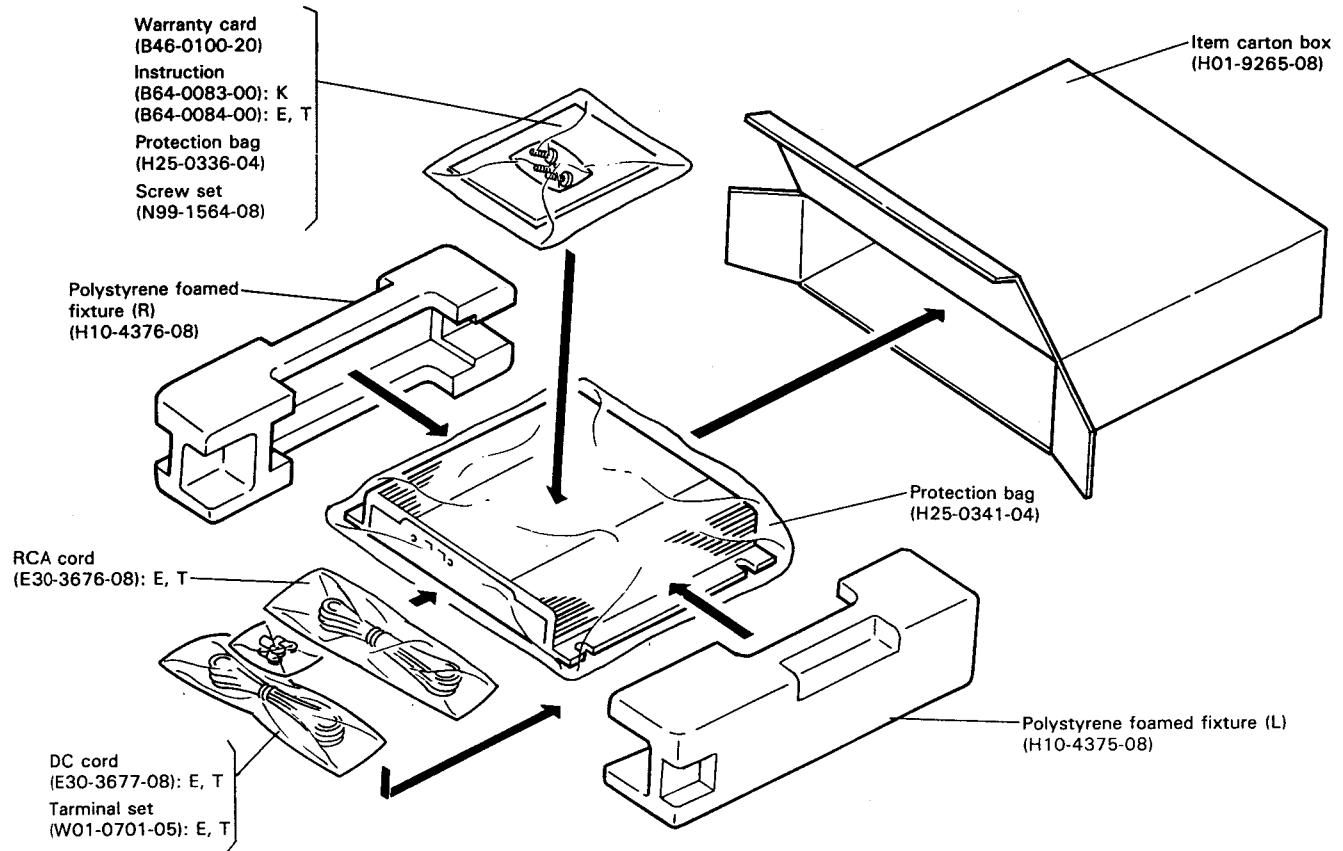
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KAC-742

## PACKING



## SPECIFICATIONS

**Audio Section**

## Max Power Output [4Ω]

4 Channel Mode .....	60 W × 4
3 Channel Mode .....	60 W × 2 + 130 W
2 Channel Mode .....	130 W × 2

## Rated Power Output [4Ω]

4 Channel Mode .....	30 W × 4 (20 Hz ~ 20 kHz, less than 0.08% THD)
3 Channel Mode .....	30 W × 2 (20 Hz ~ 20 kHz, 0.08%) + 80 W × 1 (1 kHz, 0.8%)
2 Channel Mode .....	80 W × 2 (1 kHz, 0.8% THD)

## Rated Power Output [2Ω]

4 Channel Mode .....	40 W × 4 (1 kHz, 0.8% THD)
Frequency Response .....	4 ~ 64 kHz (-3 dB)

## Signal to Noise Ratio .....

Signal to Noise Ratio .....	100 dB
-----------------------------	--------

## Sensitivity (MAX) .....

Sensitivity (MAX) .....	0.1 V (rated output)
-------------------------	----------------------

## Sensitivity (MIN) .....

Sensitivity (MIN) .....	5.0 V (rated output)
-------------------------	----------------------

## Input Impedance .....

Input Impedance .....	10 kΩ
-----------------------	-------

## Damping Factor (100 Hz) .....

Damping Factor (100 Hz) .....	More than 100
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**General**

Operating Voltage .....	14.4 V (11 ~ 16 V allowable)
-------------------------	------------------------------

Current Consumption (1 kHz, 10% THD) .....	33 A
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Dimensions (W × H × D) .....	280 × 50 × 230 mm (11 × 1-15/16 × 9-1/16 in.)
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Weight .....	3.0 kg (6.6 lb)
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Kenwood follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.

Kenwood poursuit une politique de progrès constants en ce qui concerne le développement. Pour cette raison, les spécifications sont sujettes à modifications sans préavis.

Kenwood strebt ständige Verbesserungen in der Entwicklung an. Daher bleiben Änderungen der technischen Daten jederzeit vorbehalten.

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